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Manual for Livestock Inspection at STOCKYARDS

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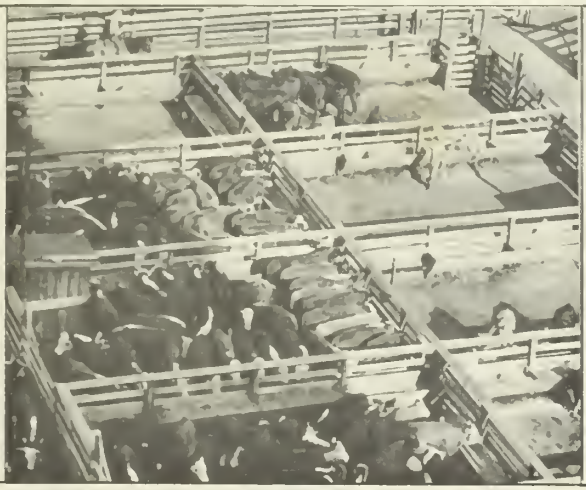

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PREFACE

The Animal Health Division (ANH) has played an important role in the eradication and control of livestock diseases. Inspection of animals at stockyards is indispensable in supporting this role and has been since 1890 when surveillance of animals began at stockyards. Although numerous instances can be cited about disease eradication effort and support, the activities of stockyard inspection go beyond eradication and control of diseases. The activities provide a surveillance program that guards against the spread of foreign diseases and obtains information on the conditions and trends of livestock diseases in the United States. This manual is a guide for livestock inspection and other activities at stockyards. It is not all inclusive—nor can it be—because situations which often arise and need the attention and decision of the ANH employee could not be covered in the manual.

Trade names are used in this publication solely for the purpose of providing specific information. Mention of a trade name does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture or an endorsement by the Department over other products not mentioned.

CAUTION: Pesticides can be injurious to humans, domestic animals, desirable plants, and fish or other wildlife—if they are not handled or applied properly. Use all pesticides selectively and carefully. Follow recommended practices for the disposal of surplus pesticides and pesticide containers.

CONTENTS

	Page
Requirements for entry to stockyards	1
Accompanying documents	1
Identity markings	1
Standards for animal health inspection at stockyards	2
Visual inspections	2
Physical examination	2
Post mortem examination	2
Laboratory examination	3
Disease reporting	3
Inspection of animals at stockyards	4
Patrol inspection	6
Reinspection, classification, and certification of outgoing shipments.	6
Health classification	8
Detecting and handling diseased and exposed animals	8
Disposition of diseased and exposed animals	10
Reactors	10
Antemortem suspects	10
Exposed animals	10
Downer and dying animals	11
Inspection of shipments unloaded in transit	11
Handling of diseased animals found in transit	11
Consignments from control and quarantine areas	12
Official tests, vaccinations, and treatments	12

CONTENTS–Continued

Page

Market cattle testing 13

Reporting diseased animals 13

Traceback 14

Cleaning and disinfecting procedures 14
- Stockyards 14
- Railroad cars 15
- Trucks and trailers 15
- Acaricides 15
- Insecticides 16
- Placarding infected pens and areas 16
- Additional information 16

Disinfectants for native diseases 18

Disinfectants for foreign diseases 20

Guidelines for operating livestock markets or stockyards in emergency disease situations 22
- Foot-and-mouth disease 22
- African swine fever 25
- Rinderpest 27
- Rift valley fever 27

Reference material 28

MANUAL FOR LIVESTOCK INSPECTION AT STOCKYARDS

REQUIREMENTS FOR ENTRY TO STOCKYARDS

Federal regulations allow a free flow of interstate shipments of apparently healthy livestock to the stockyards. Handling, safety, and marketing of the livestock are greatly facilitated by prompt health classification, identification, and assignment of pen locations (especially for animals that are diseased or that need to be segregated).

Accompanying documents

To comply with the Federal regulations established for livestock inspection, members of the inspection force must consider the information contained in accompanying documents, such as health certificates, owner's statements, waybills, brand certificates, quarantine notices and releases, permits, test charts, vaccination records, and treatment records at the time they review entry qualifications of the livestock.

Identity markings

Identity controls are established for each animal entering the stockyards, and this identity must be maintained until the animal is released. Paint marks, hip tags, back tags, ear tags, and brands are useful in maintaining identity.

STANDARDS FOR ANIMAL HEALTH INSPECTION AT STOCKYARDS

The health inspection of livestock passing through stockyards cooperating in the ANH program is conducted to:

1. Monitor livestock health.
2. Assist disease eradication programs.
3. Prevent the spread of communicable diseases.

The veterinary medical officer is responsible for the validity of health certificates issued to release livestock from the stockyards.

Visual Inspections

The veterinary medical officer or the livestock inspector must visually inspect the animals to detect abnormal situations of attitude, coordination, excretions, condition, and respiration.

Physical Examination

A veterinarian must make a physical examination of any animal showing an abnormality on visual inspection, including evidence of external parasites. The physical examination will consist of all the necessary professional techniques, such as taking temperatures, palpating, or auscultating, to reasonably determine the cause of the abnormality. Specimens of external parasites may be collected by trained inspectors.

Post Mortem Examination

A veterinarian must perform a post mortem examination of animals which should then be moved to a

rendering establishment or be disposed of in an otherwise acceptable manner. When there is an indication of a communicable disease, the stockyard veterinarian must obtain specimens for laboratory examination.

Situations may arise that will require an autopsy at the stockyards, so each stockyard office should be equipped with post mortem instruments. The post mortem should be conducted in privacy, in an isolated area of the stockyards, where cleaning and disinfection measures can be carried out.

Laboratory Examination

The laboratory examination may be performed by a veterinarian or a trained technician.

Trained ANH personnel at each stockyard will be equipped to conduct the following laboratory techniques:

1. Microscopic identification of mites.
2. Maceration-flotation examination for scabies.
3. White blood cell counts (hog cholera).
4. Preparation and submission of specimens to the National Animal Disease Laboratory or to Beltsville.

Disease Reporting

The most valid data available on the incidence of animal disease should be the result of livestock inspection at stockyards. Veterinary medical officers are responsible for the accuracy of reports from their stockyards and for transmitting the information to its proper destination in accordance with established Division policy.

INSPECTION OF ANIMALS AT STOCKYARDS

The procedures established for inspecting incoming market animals at stockyards must effectively safeguard the interest of the livestock industry by restricting the movement of infected or exposed animals. At the same time, these procedures should be flexible enough to assure the unhindered flow of commerce.

Inspections must be made during daylight hours. When necessary, however, the inspection may be made at night, if the veterinary medical officer at the stockyards determines that the artificial lighting is adequate.

Animals entering the stockyards should be inspected at least once by a livestock inspector or a veterinary medical officer. The main purposes of such inspections are to determine the health status of each animal before releasing it from the stockyards and to assist in the disease eradication programs of the ANH Division. The inspections are also important for monitoring disease conditions–giving us disease trends (by types, numbers, and locations of cases), and detecting exotic diseases. Although each animal is inspected once, several inspections are preferable. The following are points for the inspection force to consider when examining animals at a stockyard:

1. Observe animals when they are at rest and after they have been disturbed. Pay attention to their response to movement. External stimuli may produce signs of depression, excitability, or pain.
2. Observe the posture for normal or abnormal conditions. Arched back, shifting weight, favoring a foot when standing, outstretched head and neck, or elevated tail may indicate disease.

3. Observe general condition of each animal carefully. Look for emaciation, sunken eyes, dry skin, loss of hair or wool, thickening of skin, itching, external parasites, secretions, and lesions.
4. The change in respiratory rate often is associated with disease conditions. Note the rhythm, depth, and type of respiration; and when moving animals, listen for cough.
5. The animals inability to eat and drink or its loss of appetite are signs of abnormal behavior. Lesions in the mouth or malfunction of any part of the digestive system may be the cause. Look for salivation, vomiting, and diarrhea. Note the consistency and color of the feces.
6. The mucous membrane of the eyes and mouth merits attention for anemic condition. While examining this region, notice the head, neck, thorax, and front legs for edema.
7. Look for vaginal or preputial discharges, swellings, and prolapses. Check the udder for swelling, secretions, and sensitivity to cold, heat, or touch.
8. While an animal is urinating, observe for urine color, presence of blood, or straining. The frequency of urination and the quantity of urine may indicate signs of a disease condition.
9. History, important in examination, is not available at stockyards in most cases. Where it can be obtained, the inspector should not neglect this important aspect of clinical examination.
10. Use all clinical aids at your command to assist in diagnosis. The thermometer, flashlight, and stethoscope should be on hand for use. Laboratory examination may be necessary for confirmation or diagnosis. If laboratory facilities are

not adequate at the stockyards, other facilities in the Division may be used.

For a more comprehensive review of clinical examination for disease conditions, please refer to chapter 1 of Veterinary Medicine," by Blood and Henderson, 2d dition, 1963.

PATROL INSPECTION

Diseases of cattle, swine, sheep, goats, equines, and ther domestic animals in stockyards can be appraised and ontrolled best by vigilant patrol inspection activities. uring the day, members of the inspection force should:

- Complete the first patrol inspection as early in the day as possible.
- Closely inspect all night deliveries and locate any restricted consignments.
- Reinspect all holdovers (animals held overnight in yards, whether sold or not).
- Throughout the day, continually patrol the packer, feeder, stocker, trader, isolation, treatment, and shipping sections.
- Make repeated observations of as many animals as time will allow; this cannot be overemphasized.
- Supervise the humane handling of animals that may require additional testing, vaccinating, dipping, or other treatment in order to qualify them for release.
- Carefully consider the garbage feeding histories of swine and the scabies and scrapie status of sheep and goats.

REINSPECTION, CLASSIFICATION, AND CERTIFICATION OF OUTGOING SHIPMENTS

Each application for reinspection, classification, and ertification should be acted upon as promptly as

possible. The same inspection procedures as those employed for entry into a stockyard should be followed. However, if all holding areas are regularly patrolled, a detailed reinspection and classification of specific lots of slaughter animals may not be required. When time is limited, emphasis should be put upon the reinspection and classification of feeder and stocker classes that are being returned directly to the farm.

Shippers are responsible for:

- Reporting the classification of their consignments accurately.
- Securing proper certificates and permits.
- Determining that the certificate accompanies the specified animals to their destination.

The inspection force is authorized to certify to all shipments that meet interstate requirements. However, the shipper should be advised of any additional qualifications that may be required by the State of destination. The interests of the shipper are better protected, and misunderstandings are often avoided, by encouraging the shipper to meet all health requirements at the point of origin. If a shipper insists on going forward with a consignment that has fully met interstate requirements but has not met State-of-destination requirements, the State livestock official involved should be notified accordingly—and the shipper should be advised that this will be done. If the shipment is to be stopped at an inspection station en route for precautionary treatment against possible screwworm or scabies infestations, this requirement should be listed in the certificate.

When a State has authorized the Federal inspectors to conduct certain State regulatory activities at the stockyards and to issue certificates for the release of animals in intrastate movement, the specific authority should be in writing, outlining each action authorized.

HEALTH CLASSIFICATION

Animals marketed at stockyards are subject to certain basic health requirements. The consignor must furnish a limited amount of basic information concerning each consignment, such as–

- Number and type of animals offered.
- Name and address of owner.
- Point of origin.
- Name of sales agency.
- Identity of transportation agent and vehicle.

In order to claim that the animals' health status is other than undertermined or apparently healthy, a consignor or his agent must–

- Furnish appropriate supporting evidence, such as test charts, vaccination records, herd health data, or health certificates.
- Properly identify the individual animals and maintain their identity throughout the marketing process.

Effective controls can be initiated at time the animals enter the stockyards, during marketing operations, or both. In some restricted shipments, the animals can be made eligible for unrestricted release if their health status claimed by the consignor is verified or if the animals can be properly tested and treated. Each consignment offered for return to the farm must be closely classified and must fully meet the interstate requirements.

DETECTING AND HANDLING DISEASED AND EXPOSED ANIMALS

The basic responsibilities of the inspection force are limited initially to detecting diseased and exposed

animals and to imposing appropriate restrictions upon the movement of such animals until a final determination has been made.

Animals found diseased or exposed to an infectious, contagious, or communicable disease should be promptly isolated. Known reactors should be assigned to properly designated isolation pens upon receipt.

The livestock inspector should report promptly to a veterinary medical officer any observation of an abnormal condition in animals. The veterinary medical officer, responsible for making a tentative diagnosis, should make full use of the specially trained diagnosticians and the laboratory services that are available.

The Veterinarian in Charge should be aware of circumstances and conditions that warrant the need for applying State and Federal quarantines.

Emergency procedures should be followed when a foreign animal disease is suspected. The suspect lot should be isolated immediately, the Veterinarian in Charge should be notified, and diagnostic assistance should be requested.

Whenever the marketability of livestock may be affected by the detection of a disease condition, the owner or his agent should be promptly notified. He should be advised to secure the services of a veterinarian whenever such action might prove to be in his best interest. The responsibility for providing proper veterinary treatment remains with the owner or his agent.

The stockyard management should be notified promptly of the existence of any animal health hazard. The ANH veterinary medical officer should recommend that appropriate steps be taken to eliminate the hazard. If the stockyard company employs a veterinary consultant, the problem should also be discussed with him.

The procedure for prompt reporting certain diseases to the Veterinarian in Charge of the appropriate State is

to be followed as directed in ANH Division Memoranda and Notices.[1]

DISPOSITION OF DISEASED AND EXPOSED ANIMALS

Reactors

Well-marked isolation pens are to be maintained for holding animals that have reacted to one of the officially recognized tests. These pens must be so situated, drained, and fenced that they will not constitute a hazard to other livestock.

Individual scale tickets should be prepared for each reactor in case a claim for indemnity may be involved. The owner's sales agent is responsible for establishing and maintaining the identity of such reactors. The stockyard company is expected to establish and enforce control procedures whereby the penning, weighing, and releasing of diseased animals for immediate slaughter can be accomplished without exposing susceptible animals.

Antemortem Suspects

When adequate inspection service is provided, the slaughtering of antemortem suspects in local plants is an essential procedure and should be encouraged.

Exposed Animals

The responsibility for determining that animals have been exposed and that specific restrictions need to be imposed rests upon the veterinary medical officer. He is

[1] See Reference Material on page 28.

to be guided by his professional knowledge and the applicable control measures established by the Animal Health Division and the State involved. Federal regulations define an exposure to scabies and fever tick infestation and establish the control measure to be followed. Whether or not an animal is to be classified as "exposed to other disease conditions" must often be determined without the benefit of such specific regulatory guidelines.

Downers and Dying Animals

Downers and dying animals should be removed promptly from alleyways, other traffic routes, or pens used for healthy animals and into a portion of the yards not normally used by clients or other animals. An area should be designated and set aside for such animals by the stockyards officials. Then the animals should be removed from the yards as soon as possible.

INSPECTION OF SHIPMENTS UNLOADED IN TRANSIT

The Federal inspection force does not usually provide inspection service for through shipments handled during off-duty hours. When possible, separate feed, water, and rest facilities should be maintained for livestock in transit.

Handling of Diseased Animals Found in Transit

The procedures to be followed in handling diseased animals in transit may be found in the Code of Federal Regulations, Title 9, Part 71. The Federal inspector should explain application of Federal and State laws to

all parties concerned. If the shipper or carrier insists upon going forward in apparent violation, the Federal and State officials of the State of destination, as well as the local State and Federal officials, should be promptly notified. Any alleged violation should be recorded and reported as outlined in ARS 91-13, "A Guide for the Enforcement of Regulations Governing the Interstate Movement of Livestock and Poultry."

CONSIGNMENTS FROM CONTROL AND QUARANTINE AREAS

The inspection force should maintain a complete record of the current status of the numerous disease control and quarantine areas within the trade territory. The proper classification of consignments cannot be effected without this information.

Shipments Under Seal.—Sealing of vehicles is resorted to in an effort to maintain the identity of certain shipments. (See ANH Division Memorandum 557.1 dated 3/10/65). A record shall be kept of the use of all such seals.

OFFICIAL TESTS, VACCINATIONS, AND TREATMENTS

The veterinary medical officer should know the identity and the location of all lots of animals that are being held for official testing, vaccination, or treatment.

Official testing and vaccination performed by the private practitioner shall be done under the supervision of the ANH person in charge at the yards or his delegated authority. This supervision does not require the supervisor's physical presence at all times, but it does

require the supervisor to know that accepted practices and standards are being followed. The supervisor should be available for advice or consultation.

Arrangements will be made with stockyards management for adequate facilities necessary to perform any official tests or vaccinations, or for treatment, such as dipping or spraying for sheep or cattle scabies. Any part of the yards set aside or constructed for the above purposes should be kept in good repair and in a sanitary condition. Cleaning and disinfecting such facilities should be done when the supervisory veterinarian deems it advisable.

MARKET CATTLE TESTING

Full support is to be given to the market cattle testing program. This program is a method for screening market cattle for brucellosis and tuberculosis.

Stockyard inspection personnel should have full current knowledge about the market cattle testing and should take every opportunity to correctly inform others. Cooperation should be given to the operations of these procedures. A current supply of informational material on the Market Cattle Testing Program and related activities should be available at ANH stockyard offices for distribution to interested parties.

REPORTING DISEASED ANIMALS

The reporting of diseased animals is required for providing the maximum service to the livestock industry in the interest of promptly eradicating animal disease at its source. State and Federal officials in the State of origin should be given all available information

concerning each case whenever evidence of communicable diseases, or their vectors, has been found in a shipment of animals that had originated within their States. All information that might be used to locate the origin of the infected animals should be included in the report on ANH Form 2-11. Supplemental information may be submitted by letter; but, when necessary, telephone calls and teletype reports should be utilized.

TRACEBACK

Nonreactors showing lesions of tuberculosis–on slaughter.–When nonreactors showing lesions of tuberculosis are reported for cattle that have passed through stockyards, ANH employees at the stockyards should cooperate closely with local food inspectors in the development of information leading to the successful traceback of infected animals. Working arrangements should be encouraged and developed to fit the conditions prevailing at each particular location. Special attention should be given to the procedures outlined in ANH Division Memorandum 552.2 (dated 11/9/65) and 552.2, Supplement 1 (dated 2/13/67).

When necessary or requested, assistance should be given in tracing other diseased animals to premises of origin.

CLEANING AND DISINFECTING PROCEDURES[2]

Stockyards

Suitable facilities, which are clean, for handling animals humanely and expeditiously shall be provided

[2] See CAUTION under preface.

by the stockyards company or other party having such responsibility. The company shall have on hand a supply of an approved disinfectant and the means to adequately apply such disinfectant to trucks, floors, walls, pens, etc. The veterinary medical officer should routinely check to see that disinfection procedures can be applied at a moment's notice.

Railroad Cars

All livestock cars that have contained animals found infected with an infectious, contagious, or communicable disease or infested with vectors of diseases are to be cleaned and disinfected under the supervision of a Federal inspector.

Trucks and Trailers

The truck operator or the driver or both transporting known diseased animals interstate is responsible for cleaning and disinfecting the vehicle promptly after unloading. When apparently healthy animals, upon being unloaded, are found to be infected with an infectious, contagious, or communicable disease, the truck driver must be promptly notified that his vehicle shall be cleaned and disinfected. Any vehicle becoming so contaminated in intrastate commerce must be cleaned and disinfected before livestock is loaded for interstate delivery.

Acaricides

A permitted acaricide dip solution in lieu of a disinfectant may be applied to vehicles and handling facilities that have been contaminated with scab mites.

Insecticides

Vehicles and yard facilities that have been exposed to any screwworm infestation should be treated with Co-Ral.

Placarding Infected Pens or Areas

When it is known that certain areas or a pen in the stockyards has been exposed to possible contamination by an animal infected with a contagious disease, the area or pen should be placarded with form ADE 2-57G, "Clean and Disinfect This Pen." Proper treatment of the area is required before the area or pen is released for further use. This procedure should also be used where it is determined that a pen or area is not suitable for holding livestock and is rendered insanitary by such conditions as excess moisture, excess manure, and presence of debris.

Additional Information

Proper cleaning is extremely important before disinfection procedures are carried out. Removal of foreign material, such as dirt and manure, should be complete before disinfectant material is applied to any type of surface such as walls, floors, rails, and slats. Litter and manure from railroad cars or trucks should be burned, buried, or placed in an area that precludes the spread of the organism. Disinfectants applied under high pressure do the best job. When pressure is not used, the materials or area must be thoroughly soaked or scrubbed.

The selection of a disinfectant is governed by several factors:

- Type of surface to be disinfected.
- Cleanliness of surface.
- Type of pathogenic organisms which are to be treated.

- Must be known to be effective against the organism involved.
- Time available for disinfection.

Precautions should be taken not to mix one disinfectant with another and to insure that personnel do not receive hazardous exposure that could lead to injury. Directions on labels should be followed.

Federal regulations (Part 71) require that certain facilities and premises be maintained in a sanitary condition and be cleaned and disinfected when required. Pens, premises, and other facilities, which have been used or will be used to hold livestock or poultry in interstate movement, shall be maintained in sanitary condition. When it is determined that such pens, premises, or facilities are not in a clean and sanitary condition, written notice of this determination shall be given and the facilities shall be cleaned and disinfected, in accordance with CFR, Sections 71.7 and 71.10-71.12, under supervision of an inspector or veterinarian before such pens, premises or facilities are again used for livestock or poultry. Placards should be used to identify such facilities. These facilities, even if clean in appearance, shall be cleaned and disinfected if they have contained interstate shipment of animals with a contagious, infectious, or communicable disease, other than those mentioned in Section 71.4(b), under the supervision of an inspector or veterinarian before such facilities are again used for animals.

Trucks, railroad cars, and other conveyances used in interstate movement of livestock or poultry must be in clean and sanitary condition. Notice should be given by an inspector or veterinarian that the conveyance is not clean and sanitary, when that is the case, and the operator informed that he shall not use such conveyance in connection with the interstate movement of livestock or poultry, or move said conveyance interstate until it has been cleaned and disinfected under supervision.

DISINFECTANTS[1] FOR NATIVE DISEASES

Disinfectant	Percent solution	Mixture	Disease
Cresylic[2]	4	1 cup to 2 gal. water	Brucellosis Hog cholera Newcastle disease Shipping fever Swine erysipelas Tuberculosis Vesicular stomatitis
Sodium carbonate (soda ash)	4	1 lb. to 3 gal. water	Scrapie
Sodium hydroxide[3] (lye) Caustic soda	2	13½ oz. can to 5 gal. water	Hog cholera Scrapie
Sodium orthophenylphenate (USDA approved)[4]	1	1 lb. to 12 gal. water	Brucellosis Tuberculosis Hog cholera Vesicular stomatitis
	2	2 lb. to 12 gal. water	Newcastle disease
Sodium hydroxide[3] (lye)	5	5 (13½ oz.) cans to 10 gal. water	Anthrax Blackleg

[1]Precaution should be used by following directions on label.

[2]See Permitted List in ANH Division Memorandum 586.1.

[3]When using lye disinfectant of any strength, wear protective goggles, rubber gloves, and coveralls. Wash area of the body exposed to lye, and treat with vinegar.

[4]Solution must be applied at temperature 60°F. or above.

NOTE: Commercial-type disinfectants may be used for the above diseases except for hog cholera and scrapie. The label of general disinfectants that are permitted for official disinfecting purposes will include the following information: (Part 71.10, Title 9, Code of Federal Regulations).

1. A USDA registration number
2. A statement which gives directions for the preparation of the disinfectant solution at the proper strength to be tuberculocidal (Kills TB or acids fast organisms).

DISINFECTANTS[1] FOR FOREIGN DISEASES

Disinfectant	Percent solution	Mixture	Disease
Cresylic disinfectant[2]	4	4 oz. to 1 gal. of water	Vesicular exanthema Vesicular stomatitis (V.S.)[3] Sheep pox Bovine infectious petechial fever Contagious agalactiae Contagious bovine pleuropneumonia
Sodium Orthophenylphenate[4] (USDA approved)		1 lb. to 12 gal. of water	East Coast fever Fowl plague Heartwater Infectious or epizootic infertility of cattle Nagana - trypanosomiasis Nairobi sheep disease
Sodium hydroxide[5] (lye)	2	13½-oz. can to 5 gal. water	Borna disease Bluetongue African swine fever Ephemeral fever Louping-ill
Sodium carbonate (soda ash)	4	1 lb. to 3 gal. water	Lumpy skin disease Nairobi sheep disease Rift Valley Fever Rinderpest Teschen disease Venezuelan equine encephalomyelitis

Sodium hydroxide[5] (lye)	2	13½-oz. can to 5 gal. water	Foot-and-mouth disease (F.M.D.)
Sodium carbonate (soda ash)	4	1 lb. to 3 gal. water	
Acetic acid	2	2 parts glacial acetic acid to 98 parts water	

[1]Precaution should be used by following directions on label.

[2]Permitted by the U.S. Department of Agriculture for official disinfection.

[3]V.S. occurs in the U.S. and may be confused with F.M.D.

[4]Solution must be applied at temperatures 60°F. or above.

[5]When using lye disinfectant of any strength, wear protective goggles, rubber gloves, and coveralls. Wash areas of the body exposed to lye and treat with vinegar.

GUIDELINES FOR OPERATING LIVESTOCK MARKETS OR STOCKYARDS IN EMERGENCY DISEASE SITUATIONS

In the event a foreign animal disease is suspected or has been diagnosed in a livestock market or stockyard, the guidelines given below are to be used.

The operation of a stockyard under emergency conditions will vary according to the location of the stockyard, size of the yards, disease involved, contacts in the yards, and the state of investigation (I, disease suspected; II, disease diagnosed).

Procedures for handling foot-and-mouth disease (F.M.D.) have been used as the basis for developing guidelines for stockyard operations during an emergency. This disease affects a broad spectrum of the livestock species, is highly contagious, and survives for extended periods of time in meat products and in the environment. The differences in manner of handling certain specific diseases have been included following the F.M.D. guide outlines.

The ANH Emergency Animal Disease Eradication Guide should be referred to for detailed information on procedures for conducting eradication measures. Stockyard management should be briefed on procedures for operating the stockyard in emergency disease situations.

Foot-and-Mouth Disease

Species Affected: Affects cattle, sheep, swine, goats, deer, and other cleft-footed animals, wild and domestic.

Condition I: Disease suspected in market or stockyards.

1. Manner of handling:
   (a) Isolate the lot.
   (b) Investigation by ANH Division foreign animal disease diagnostician.

(c) Collection of specimens, notification of Hyattsville office, and shipment to laboratory.
(d) Determine origin of suspect animal and possible exposure.
(e) Determine area and vehicles exposed by suspect.

2. Disinfection: Set up temporary disinfection station at entrance to the lot. (Footbath, bucket of disinfectant, and brush.)
3. Disinfectants on hand: Minimum of 2 lb. of sodium hydroxide (NaOH) to be used initially to set up temporary disinfection station. (Mix to make 2% solution.)
4. Market operation:
   (a) Restricted movement around suspected lot.
   (b) Maintain accurate records on all movements from the yard (destination).
5. Diagnostic time:
   (a) Earliest—24 to 48 hours on complement fixation.
   (b) May extend 3-4 days on animal inoculation.

Condition II: Disease diagnosed in market or stockyards.

1. Manner of handling a confirmed case.
   (a) Stop all market activities.
   (b) Remove animals infected and exposed from the yard, in a leak-proof vehicle, to an isolated area for slaughter and burial or burning. The virus survives for long periods in meat products, (bone) precluding salvage.
2. Cleaning and disinfection:
   (a) Burn all items which cannot be properly cleaned and disinfected. Examples: Feed, wooden feed racks, litter.

(b) Scrape and clean all remaining items including fences, watering facilities, vehicles, scales, ramps, chutes.

(c) Remove all manure from floor of each pen and alley way to an isolated area for burial or formation of a compost pile. (Lime and fence.)

(d) Apply recommended disinfectant.

(e) Thirty days later place test animals in market for 90 days.[3]

(f) Set up disinfection stations at entrance and exit of markets to clean and disinfect all vehicles entering and leaving market.

(g) Set up footbaths for all personnel entering and leaving market.

3. Future market operation:

   Would depend upon location of yard (in quarantine area). If not in a quarantine area, could resume normal operations after test animals are removed.

4. Feed on hand:

   None—not practical to stockpile. If needed for test animals, purchase from source outside of affected area.

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[3]This requirement is based on the regulations pertaining to outbreaks of foot-and-mouth disease on a farm or ranch. The 120-day requirement for the yard to be closed may be altered at the discretion of the Director of the Division. Factors affecting the length of time in which markets may be required to remain closed are:

1. Location of the infected animals in the market.
2. Number of infected animals.
3. Organization of the specific market.
4. Physical facility; example, concrete floors.
5. Ability to clean and disinfect the entire yard.
6. Disease incidence outside the yard.
7. Adequate area and facilities for disposal of manure, materials, and animals.
8. Type and class of livestock handled.

5. Disinfectants on hand:
   None—not practical to stockpile for eradication. Purchase as needed.

Condition III: Noninfected market or stockyard operation on quarantine zone.

1. Market operation:
   (a) Accept animals on permit only. Animals originating in the area would move on permit only; those from outside the area would obtain permit from area quarantine station.
   (b) Accept animals for slaughter only.
   (c) Inspection of all animals prior to mixing in the market regardless of origin.
   (d) No animals to remain in market between sales.
   (e) Maintain accurate records on all movements (origin and destination).

2. Cleaning and disinfection:
   (a) Clean and disinfect entire yard as soon as quarantine area is established.
   (b) Set up to clean and disinfect all vehicles.
   (c) Set up footbath at all ramps for all animals entering and leaving.
   (d) Maintain continued "clean up" of alleys and pens.
   (e) Set up footbath for personnel.

African Swine Fever

Species affected: Affects only swine. Other species would be permitted more liberal movement than under F.M.D. quarantine.

Condition I: Disease suspected in market or stockyard.

The suspicion of African swine fever would be handled in the same manner as suspicion of F.M.D. would be handled.

Condition II: Disease diagnosed in market or stockyards.

1. Manner of handling confirmed cases:
   (a) Stop all swine operations and restrict movement of other species to avoid mechanical transmission. (Footbath for other species prior to leaving yard, clean and disinfect vehicles prior to leaving yards, restrict shipment of other species to point of destination where there are no swine.)
   (b) Slaughter and bury or burn infected and exposed swine. African swine fever virus survives in meat product for extended periods of time.
2. Cleaning and disinfection:
   Following removal of all species of animals from the yard, the entire yard must be cleaned and disinfected.
3. Future market operations:
   (a) Following cleaning and disinfection operations, the market may reopen for all species except swine. Footbaths and vehicle cleaning and disinfection will be continued until the swine operations are declared safe to resume operations.
   (b) The swine portion of the market will remain vacant for 30 days following cleaning and disinfection completion. Test animals will then be placed in the swine portion of the market for 90 days. If test animals remain

normal, the barn may return to normal operation at the end of the test period.[4]

Condition III: Noninfected livestock market or stockyards operation in a quarantine zone.

1. Market Operations:
   (a) Accept other species only on permit which states that the animals had originated from a premises which did not allow contact with swine.
   (b) Accept swine only on permit which states that they originated from inspected premises and are for slaughter only.
   (c) Clean and disinfect all vehicles entering and leaving market and maintain footbath for personnel and livestock entering and leaving market.

Rinderpest

Rinderpest affects all ruminants (cattle, goats, and sheep) and has been reported to affect swine and would be handled in the same manner as F.M.D.

Rift Valley Fever

Rift valley fever affects sheep, cattle, goats, and man. It is classified as an arbovirus. The virus has been isolated from mosquitoes. In addition to cleaning and disinfecting procedures, insect control should be initiated. Particular attention should be given to the protection of man since man is highly susceptible and may become infected during epizootics. The *market operations* should be conducted the same as for F.M.D.

[4] See footnote 3.

REFERENCE MATERIAL

The following reference material is listed for guidance in the activities of stockyards inspection. The veterinary medical officer should have this material on file, readily available for use by all stockyards employees. Reference material should be kept current since memos are revised, cancelled, or published as new ones.

Code of Federal Regulations, Title 9, Animal and Animal Products.

Health Requirements and Regulations Governing the Interstate and International Movement of Livestock and Poultry, ARS 91-17-5, October 1969.

A Guide for the Enforcement of Regulations Governing the Interstate Movement of Livestock and Poultry, ARS 91-13, August 1959.

ANH Division Memorandum 510.8, "Policy Guide".

ANH Division Memorandum 511.5 (dated 8/15/62), Cleaning and Disinfecting of Equipment."

ANH Division Memorandum 552.2 (dated 11/9/65) Supplement 1 (dated 2/13/67), Form ANH 6-35.

ANH Division Memorandum 556.1 (dated 9/24/59), Supplement 1 (dated 4/30/64), and Supplement 2 (dated 6/7/65), Treatment of Cattle and Sheep Scabies.

ANH Division Memorandum 556.3 (dated 12/21/65), Maceration-Flotation Method for Demonstrating Scabies.

ANH Division Memorandum 557.1 (dated 3/10/65), Scrapie Eradication Program.

ANH Division Memorandum 558.1 (dated 1/16/69), Tick Surveillance and Collection of Suspected Exotic Ticks.

ANH Division Memorandum 561.1 (dated 1/16/70) Minimum Standards for Division Participation in Cooperative Hog Cholera Eradication Program.

ANH Division Memorandum 576.1 (dated 8/8/56), Reporting Arrival and Disinfection of Infectious Railroad Cars.

ANH Division Memorandum 576.2 (dated 8/23/57), Inspection of Feed, Water, and Rest Stations.

ANH Division Memorandum 576.5 (dated 12/8/57), Supplement 1 (dated 2/5/58), Supplement 2 (dated 4/15/65), 28 Hour Law Enforcement and Reporting.

ANH Division Memorandum 577.3 (datcd 3/9/66), Supervision of Swine Vaccination at Public Stockyards.

ANH Division Memorandum 577.6 (dated 8/23/65), Application for Federal Inspection at Livcstock Markets.

ANH Division Memorandum 577.7 (dated 3/24/69), Instructions for Reporting Activities at Public Stockyards.

ANH Division Memorandum 577.7, Supplement 2 (dated 7/31/67), ANH 1-63, Tally Card for Reporting Animal Diseases at Public Stockyards.

ANH Division Memorandum 577.8 (dated 6/9/66), and Supplemcnt 1 (dated 11/10/66), Health Certificates for Public Stockyards.

ANH Division Memorandum 577.10 (dated 9/9/66), Recommended Equipment and Procedural Guidelines for Hog Cholera Diagnosis in Public Stockyards.

ANH Division Memorandum 577.12 (dated 11/8/67), Approval and Removal of Stockyards, Livestock Markets and Slaughtering Establishments From Approved List.

ANH Division Memorandum 582.1 (dated 10/4/63), Supplement 1, 2, 3, 4, Radiological Defense, Instruments, Use.

ANH Division Memorandum 582.2 (dated 8/15/62) Reporting Information Concerning Radiation.

ANH Division Memorandum 586.1 (dated 9/15/68), Cresylic Disinfectants Permitted for Use in Official Disinfection.

ANH Division Memorandum 586.2 (dated 6/3/63), Dipping Vat Management in the Absence of a Vatside Test.

ANH Division Memorandum 586.6 (dated 11/5/64), Pesticides in Eradication Division Programs.

ANH Division Memorandum 587.1 (dated 4/15/66), Authorization Requirements and Reporting Procedures for Diagnostic Services (NADL), and Technical Services (Beltsville).

ANH Division Memorandum 587.6 (dated 11/6/64) and Supplement 1 (dated 1/26/67), Field Hog Cholera Specimens for NADL.

ANH Division Memorandum 587.7 (dated 10/11/63), Submitting Parasitic Mites to Beltsville for Confirmation and Cataloguing.

ANH Division Notice dated January 7, 1965, Cleaning and Disinfecting Sheep facilities at Public Stockyarrds.

Agriculture Handbook No. 337, Improving Services and Facilities of Public Stockyards (October 1967), Packers & Stockyards Administration, USDA.

Current Directory of Consumer Protection, Program Establishments Circuits and Officials, Consumer, and Marketing Service, USDA.

GPO 891-083